

Remarks/Arguments

Claims 1-5 and 7-20 are pending. The claims have been amended to more clearly and distinctly claim the subject matter that applicants regard as their invention. No new matter is believed to be added by the present amendment.

Rejection of claims 1-5 and 7-16 under 35 USC 103(a) as being unpatentable over Wasilewski (US Pat No 5420866) in view of Wasilewski (US Pat Pub No 2002/0094084A1)

Applicants submit that for at least the reasons discussed below the combination of Wailewski '866 and Wasilewski '084 fail to teach or suggest each and every limitation of amended claim 1, and as such, amended claim 1, and the claims that depend therefrom, are patentably distinguishable over the suggested combination.

The present invention relates to a system that is able to handle two conditional access systems, in particular, a conditional access system associated with a content provider and a conditional access system associated with a local network, for example, a home network. In the exemplary embodiment, the local conditional access system comprises an extended conditional access system (XCA) that provides access protection using local entitlement control messages (LECM) (page, 4, lines 15-30).

In this regard, a service transmitted within a system that includes XCA conditional access may have **two** service and entitlement control message packet pairs associated with a particular service. For example, a video service may have associated with it a service and entitlement control message packet pair that includes the ECM identifier of the CA system of the content provider, and another service and entitlement control message packet pair that includes a LECM identifier of the XCA system. See for example, page 14, lines 9 - page 10, line 14, which shows service and entitlement identifier messages for a video service and an audio service, **each service having associated with it two service and entitlement control message packet pairs.**

In such a system, it is desirable to provide a security device that can identify the received service and entitlement control message packet pairs, wherein the message packet pairs may include a pair having a conditional access entitlement control message identifier and a pair having a local entitlement control message identifier. The present invention provides for identifying the message packet pair based on a predefined convention, for example, the order in which the message packet pairs are received (see page 14, lines 21-23).

In this regard, claim 1 has been amended to recite:

extracting **at least two service and entitlement control message packet identifier pairs** from data **associated with said service** and **automatically identifying one of the extracted pairs according to a predefined convention**,

wherein a first one of the received pairs includes a conditional access entitlement control message identifier and a second one of the received pairs includes a local entitlement control message identifier. (emphasis added)

Applicants submit that the combination of cited references fail to teach or suggest at least the above-emphasized limitation of amended claim 1.

The Office Action acknowledges that Wasilewski '866 fails to teach that a first one of the received pairs includes a conditional access entitlement control message identifier and a second one of the received pairs includes a local entitlement control message identifier. The Office Action cites Wasilewski '084 to cure the deficiency of Wasilewski '866.

Applicants submit that present claim 1 is patentably distinguishable over the suggested combination because the suggested combination fails to teach or suggest the local entitlement control message identifier recited in claim 1, and even if such a limitation is disclosed, the suggested combination is improper since there is no teaching in either Wasilewski '866 or Wasilewski '084 to combine the references in the manner suggested. Applicants also submit that even if the references are combined in the manner suggested by the Office Action, the suggested combination still fails to teach or suggest the above-emphasized limitation of amended claim 1.

Wasilewski '084 relates to a system for providing conditional access protection when service providers (100) transmit a program through a given network operator (120) to a set top unit STU of customers (130). The reference

recognizes that the network system is categorized into level 1 (L1) and level 2 (L2) services (para. 4), wherein the L1 services provide the information session connection and define the portion of the system responsible for setting up and maintaining interactive communication session between customers and service providers (SP), and L2 services define the portion of the system responsible for providing the programs requested to the L1 portion of the system and for terminating the service at the customer end of the network (para. 4). In particular, Wasilewski '084 recognizes that it is desirable to provide conditional access to a program after it exits a file server of a service provider (SP), but before it enters the L1 portion of the system (para. 8).

In this regard, Wasilewski '084 provides a system that receives programs enveloped in one of a plurality of network protocols, removes the program packets from a first network protocol, applies a conditional access layer, and encapsulates the output in a second network protocol (para. 10). In the disclosed embodiment, a Service Access and Broad Band Encrypter Re-mapper (SABER) 20 performs the functions of extracting MPEG-2 transport packets, adding conditional access, and then re-encapsulating the packets in a second protocol. (para. 36). With regard, to the added conditional access, Wasilewski '084 provides three functional levels of protection: program encryption, control word encryption and authentication, and entitlement message encryption and authentication. At the first level, the program bearing MPEG-2 transport packets are encrypted using random number generated keys, which are referred to as control words. At the second level, the control words are encrypted using a second randomly generated key, referred to as a multi-session key. At the third level, the multi-session key is encrypted using a public key cryptography technique (para. 45).

However, nowhere does Wasilewski '084 teach or suggest using local entitlement control messages as recited in amended claim 1. Rather, Wasilewski '084 teaches extracting transport packets encapsulated in one protocol, adding conditional access, and re-encapsulating the output in a second protocol. The portions of Wasilewski '084 cited in the Office Action describe this process. This process addresses the needs discussed in Wasilewski '084 for providing programs between the service provider and the L1 service provider (para. 10). In view of the

above, applicants submit that Wasilewski '084 fails to cure the deficiencies of Wasilewski '866 as applied to amended claim 1.

Also, applicants submit that even assuming that Wasilewski '084 teaches the recited local entitlement control messages the suggested combination is improper as neither reference teaches or suggest the combination. The two references are directed to different problems and provide different solutions. As mentioned above, Wasilewski '084 is directed to the problem of an interface between a service provider and a L1 service provider, and provides a system that extracts, applies conditional access, and re-encapsulates the received transport packets before providing them to the L1 service provider.

Wasilweski '866 addresses combining the content of several different service providers on the transmit side into a single data stream, and teaches a method for identifying the content of a particular service provider by identifying a conditional access system ID (CA_System_ID) associated with the provider (see col. 12, lines 12-16). Wasilewski specifically discusses the fact that each separate service provider will use a separate decoder (set top box) to descramble their own particular transmissions (see, for example, col. 5, lines 1-17 and col. 11, line 43 to col. 12 line 26).

Thus, the two references address different problems and nothing in either reference teaches or suggests combining them in the manner suggested in the Office Action.

Furthermore, applicants submit even assuming arguendo that the proposed combination is proper and discloses the features cited in the Office Action, amended claim 1 is patentably distinguishable over the suggested combination because the combination still fails to teach or suggest each and every limitation of amended claim 1. In particular, applicants submit that neither Wasilewski '866 nor Wasilewski '084 teach or suggest "... extracting **at least two service and entitlement control message packet identifier pairs** from data **associated with said service** and **automatically identifying one of the extracted pairs according to a predefined convention...**" as recited in amended claim 1. As discussed above, according to the invention, a particular service, such as a video service, may have associated with it a service and entitlement control message packet pair that includes the ECM identifier of the CA system of the content

provider, and another service and entitlement control message packet pair that includes a LECM identifier of the XCA system (page 14, lines 9 - page 10, line 14, which shows each service having associated with it two service and entitlement control message packet pairs.) Nowhere does either reference teach or suggest **two** service and entitlement control message packet identifier pairs associated with a particular service. Nowhere does either reference teach or suggest **automatically identifying** one of the extracted pairs according to a predefined convention. Therefore, applicants submit that amended claim 1, and the claims that depend therefrom, are patentably distinguishable over the suggested combination of Wasilewski '866 and Wasilewski '084.

Similarly, claim 4 has been amended to recite "... if **more than one** service and entitlement control message packet identifier pair **associated with the service** are extracted, automatically identifying at least one of the extracted pairs according to a predefined convention..." Applicants submit that the feature of multiple service and entitlement control message packet identifier pairs for a particular service is not shown in either reference, and as such, amended claim 4, and the claims that depend therefrom are patentably distinguishable over the suggested combination of references.

Claim 19 has been similarly amended to recite "... identifying, in the datastream, **at least two** service and entitlement control message packet identifier pairs associated with said service, wherein one of the received pairs includes a conditional access entitlement control message identifier and a second one of the received pairs includes a local entitlement control message identifier..." and is believed to be patentably distinguishable over the suggested combination for at least the same reasons as those with respect to amended claim 1.

Claims 17 and 18 have been amended to recite "... if **more than one service and entitlement control message packet identifier pair associated with the service** are extracted, automatically identifying at least one of the extracted pairs as a broadcast entitlement control message according to a predefined convention..." As discussed above, Applicants submit that the feature of multiple service and entitlement control message packet identifier pairs for a particular service are not shown in either reference, and as such, amended claims

17 and 18 are patentably distinguishable over the suggested combination of references.

Having fully addressed the Examiner's rejections it is believed that, in view of the preceding amendments and remarks, this application stands in condition for allowance. Accordingly then, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the applicant's attorney at (609) 734-6815, so that a mutually convenient date and time for a telephonic interview may be scheduled.

Respectfully submitted,

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